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EXAMINER	
MANNING, JOHN	
ART UNIT	**PAPER NUMBER**
2614	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/734,973	PANABAKER, RUSTON	
	Examiner	Art Unit	
	John Manning	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18,30,36-38 and 40-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18,30,36-38 and 40-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to amended claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3-13, 30, 38, and 40-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Markel et al. (US Pat App Pub No 2002/0057286) in view of Keronen et al (US Pat No 6,567,530).

In regard to claim 1, Markel discloses a video enhancement editing system that utilizes a device independent enhancement scripting language. The claimed step of obtaining a schema document, the schema document comprising a trigger data structure an announcement data structure, and a package data structure defining enhanced programming content is met by Figures 4 and 5. "The present invention may comprise a file that includes enhancement types, enhancement attributes, scheduling, and other information. The file may be of XML format and may have a document structure with elements organized into groups of child elements. Attachment A provides a specification of an embodiment of the present invention. FIG. 4 depicts child element

groups of a root element of an enhancement file of the present invention. Child elements 400 comprise head elements 402, library elements 404, content elements 406, and timeline elements 408" (Paragraph 0026, Lines 1-10). The claimed steps for a timeline data structure regarding timing for the delivery of enhanced programming content and the timeline data structure specifying specific times relative to a specific start time and a particular order for delivering each of the trigger, announcement and package data structures to the receiver are met by Figures 4 and 5. "Timeline elements 408 may be employed to specify and time schedule rendering of enhancements in conjunction with a program. Timeline elements are described in greater detail in a later section" (Paragraph 0026, Lines 22-25). "The attributes startTime, loopNTimes, and loopInterval may be employed to determine the starting point and frequency of the action specified by the value attribute" (Paragraph 0027, Lines 59-62). The claimed limitation of "the schema document is generic and non-specific to hardware and software modules associated with authoring tools used to create the enhanced programming content, such that the enhanced programming content is multi-platform compatible" is met by Figure 5. "One method of utilizing the present invention is to parse the platform independent enhancement file to produce an enhancement file compatible with receivers 306. Enhancement information may then be broadcast in conjunction with a program, or receivers may be configured to retrieve enhancement information employing an Internet connection or other network that is not depicted"(Paragraph 0025, Lines 16-27). The step analyzing the timeline data structure to determine when to deliver each of the trigger, announcement and package data

structures is met by the scheduling of enhancements as detail in Paragraph 0027. The ATVEF specification as detailed by Markel discloses a loop attribute to prevent multiple deliveries of the enhanced programming content to the receiver. The ATVEF specification discloses with respect to the parameter RetransmitExpiration: "This allow a resource to be carouseled, or sent repeatedly to increase the chances of delivery without missing segments. Set to zero if the resource will not be retransmitted" (Page 22). The reference fails to explicitly disclose the step of verifying the authenticity of the schema document by comparing the schema document against a stored standardized schema document. Keronen teaches verifying the authenticity of a document by comparing the schema document by comparing a document against a stored standardized document so as to ensure that a document is of proper form (Col 2, Lines 22-27). Consequently, it would have been obvious to one of ordinary skill in the art to modify the reference with verifying the authenticity of a document by comparing the schema document by comparing a document against a stored standardized document so as to ensure that a document is of proper form.

In regard to claim 3, Markel discloses the claimed step for accessing the schema document comprises the step of retrieving the schema document from a repository containing a plurality of schema documents (Figure 4; Paragraph 0026, Lines 7-14).

In regard to claim 4, Markel discloses the claimed step for creating the schema document comprises a step for creating the schema document with an authoring tool (Figure 2; Paragraph 0024).

In regard to claim 5, Markel discloses the claimed step of the enhanced programming content comprising at least one of an announcement element, a trigger element, and a package element (Figure 4; Paragraph 0011, Lines 1-3).

In regard to claim 6, claimed step is interpreted by the examiner as being written in the alternative, such that the claimed limitation may be met by delivering the enhanced programming content in a "sequential order" or "an asynchronous order." Markel discloses a timeline data structure that functions as the carousel data structure where the data modules are in sequential order (Figure 3; Paragraph 0025).

In regard to claim 7, Markel discloses the claimed step of the delivering the programming and enhancements over a communications line (Figure 4; Paragraph 0026, network 304).

In regard to claims 8-9, the ATVEF specification as detailed by Markel discloses a transport A and B protocol.

In regard to claim 10, the combined teaching discloses a method and apparatus of communicating audio/video programs with enhancement data. The combined teaching fails to explicitly disclose delivering the enhanced programming content before a deliver-by time. However, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the combined teaching with delivering the enhanced programming content before a deliver-by time so as to ensure that the receiver system receives the enhanced programming data necessary for an interactive viewing experience.

In regard to claim 11, the combined teaching discloses a method and apparatus of communicating audio/video programs with enhancement data. The combined teaching fails to explicitly disclose delivering the enhanced programming content by a start time. However, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the combined teaching with delivering the enhanced programming content by a start time so as to allow the receiver system to be interactive.

In regard to claims 12-13, the ATVEF specification as detailed by Markel discloses a carousel data structure. The trigger data structure, the announcement data structure, and the package data structure being delivered as fast as possible is implicit to the reference. Assuming arguendo with respect to the implicit teaching of the trigger data structure, the announcement data structure, and the package data structure being delivered as fast as possible, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the combined teaching with transmitting enhancement data as fast as possible so as to advantageously provide the user with real-time interactive programming.

In regard to claim 30, Markel discloses the claimed step of the document comriseing an XML document (Paragraph 0026, Lines 3-5).

In regard to claim 38, see Paragraph 0025 of Markel.

In regard to claim 40, the aforementioned combined teaching discloses a method and apparatus of communicating audio/video programs with enhancement data. The combined teaching fails to explicitly disclose using a tag to validate the authenticity of

the document. However, the examiner gives OFFICIAL NOTICE that it is notoriously well known to use tag for identification purposes so as to ensure correct receipt of information. Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement the combined teaching with the use of tags for identification purposes so as to ensure correct receipt of information.

In regard to claims 41-42, Markel implicitly discloses the specifying a delivery time and an order by scheduling the enhancements (Paragraph 0026, Lines 22-25).

In regard to claim 43, Markel discloses that the enhancements are rendered in conjunction with a program. Since the enhancements are not rendered before the program, it is implied that the timeline is zeroed with the beginning of the program.

In regard to claim 44, Markel discloses scheduling the enhancement with respect to time. The number of frame of a video increase with time therefore the enhancements can be delivered after a particular number of frames.

4. Claims 14-18 and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Markel et al. in view of Keronen et al and further in view of Carr (US Pat App Pub No 2003/0133043).

In regard to claim 14, the combined teaching fails to disclose the recited steps. Carr teaches the steps of delivery so as to provide the user with the enhancements. The claimed step for delivering an announcement signal comprising the announcement data structure to the receiver, the announcement signal identifying tile availability of enhanced programming content to the receiver is met by the ATVEF announcement. "Generally, an ATVEF announcement indicates that enhancement data is being

transmitted, a resource includes one or more files that contain the enhancement data" (Paragraph 0021, Lines 1-3 of Carr). The steps of delivering a package comprising the package data, delivering a trigger signal comprising the trigger data structure and in response to a selection by the viewer to receive the enhanced programming content, a step for displaying the enhanced programming content to the viewer is met by: "Generally, an ATVEF announcement indicates that enhancement data is being transmitted, a resource includes one or more files that contain the enhancement data, and a trigger synchronizes the enhancement data with the TV transmission. An announcement may describe the location of both the resource stream and the trigger stream. For each television (TV) channel, one or more enhancements may be offered as choices presented to the user, who can select which of the enhancements, if any, to view" (Paragraph 0021, Lines 1-9 of Carr). Consequently, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the combined teaching with the step of delivery for the stated advantage.

In regard to claim 15, the "package" may include at least one file containing enhanced programming content. "Enhancement data may include graphics (e.g., web pages, multimedia information, or other digital data files), presentation layout" (Paragraph 0013, Lines 13-15 of Carr).

In regard to claim 16, the "package" may include at least one link to enhanced programming content. "Enhancement data may include graphics (e.g., web pages, multimedia information, or other digital data files), presentation layout" (Paragraph 0013, Lines 13-15 of Carr).

In regard to claim 17, the aforementioned combined teaching discloses a method and apparatus of communicating audio/video programs with enhancement data. The reference fails to explicitly disclose the trigger comprising a link to enhanced programming content. However, the examiner gives OFFICIAL NOTICE that it is notoriously well known that a trigger comprises a link to enhanced programming content so as to announce the availability of the interactive television experience to the user. Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement the combined teaching with a trigger that comprises a link to enhanced programming content so as to announce the availability of the interactive television experience to the user.

In regard to claim 18, the step of accepting a notification displayed to the viewer of the availability of enhanced programming content is disclosed. "For each television (TV) channel, one or more enhancements may be offered as choices presented to the user, who can select which of the enhancements, if any, to view" (Paragraph 0021, Lines 7-9 of Carr).

In regard to claims 36-37, the combined teaching fails to disclose the communications line comprises a plurality of different channels. Carr teaches the communications line comprises a plurality of different channels so as to provide for greater flexibility and/or to alleviate bandwidth concerns of the transport medium. "To provide for greater flexibility and/or to alleviate bandwidth concerns of the transport medium 22, some embodiments of the invention transmit (using IP multicast) enhancement data associated with multiple A/V channels (e.g., TV channels) over a link

that is separate from the transport medium used to transmit A/V content (or, alternatively, that is part of the same delivery mechanism as the A/V content but is not associated with any A/V channel, e.g., an MPEG-2 transport stream with ancillary information in a data-only program separate from the A/V programs)" (Paragraph 0025, Lines 1-10 of Carr).

5. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Markel et al. in view of Keronen et al and further in view of Davis et al. (US Pat App Pub No 2002/0095677).

In regard to claim 45, the aforementioned combined teaching discloses a method and apparatus of communicating audio/video programs with enhancement data. The combined teaching fails to explicitly disclose that the enhancement is delivered in an electronic mail message. Davis discloses an enhancement that is delivered in an electronic mail message so as to allow the viewer to review that information when their mood changes from that of a viewer to that of a browser (Paragraph 0043). Consequently, it would have been obvious to one of ordinary skill in the art to modify the combined teaching with an enhancement that is delivered in an electronic mail message for the stated advantage.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Markel et al. in view of Keronen et al and further in view of Valdez Jr. (US Pat No 6,426,778).

In regard to claim 2, the aforementioned combined teaching of claim 1 fails to explicitly disclose a step for viewing television programming deliverable to the receiver and in response to viewing the television programming, a step for creating the schema

document associated with the television programming. The Valdez Jr. reference teaches viewing television programming deliverable to the receiver so as to facilitate the editing of the "compositions" or enhance content and in response to viewing the television programming creating the schema document associated with the television programming so as to enhance the viewing pleasure of the television viewer. "Media playback 311 provides a facility for playing back compositions locally at the playback system or may transmit a composition as video transmission 321 and data transmission 323" (Col 8, Lines 36-40). And, "to support editing of compositions of such a variety of media, a media editing system 309 is provided that may create data structures for organizing and storing information regarding a composition and perform operations for manipulating these data structures" (Col 8, Lines 22-26). Consequently, it would have been obvious to one of ordinary skill in the art to implement the combined teaching with viewing television programming deliverable to the receiver so as to facilitate the editing of the "compositions" or enhance content and in response to viewing the television programming creating the schema document associated with the television programming so as to enhance the viewing pleasure of the television viewer.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Manning whose telephone number is 571-272-7352. The examiner can normally be reached on M-F: 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JM
September 21, 2005

JOHN MILLER
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